

# Pranav Minasandra

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Interests	I am keen on developing novel theories of behaviour in animals and developing methods to answer behavioural questions in creative ways. Particularly, I am interested in the dynamics of behaviour at the fine-scale, and how it connects with social behaviour.	
Education	<b>Max Planck Institute of Animal Behaviour, Konstanz, Germany</b> PhD - International Max Planck Research School of Organismal Biology	2020 onwards
	<b>Indian Institute of Science (IISc), Bengaluru, India</b> - Master of Science in Biology - Bachelor of Science (Research) with a major in Biology	2015 - 2020
Publications	<ol style="list-style-type: none"><li><b>Minasandra, P.</b>, Jensen, F. H., Gersick, A. S., Holekamp, K. E., Strauss, E. D. &amp; Strandburg-Peshkin, A. Accelerometer-based predictions of behaviour elucidate factors affecting the daily activity patterns of spotted hyenas. <i>Royal Society Open Science</i> <b>10</b>, 230750. doi:<a href="https://doi.org/10.1098/rsos.230750">10.1098/rsos.230750</a> (Nov. 2023).</li><li>Kunjar, S., Strandburg-Peshkin, A., Giese, H., <b>Minasandra, P.</b>, Sarkar, S., Jolly, M. K. &amp; Gradwohl, N. Link updating strategies influence consensus decisions as a function of the direction of communication. <i>Royal Society Open Science</i> <b>10</b>, 230215. doi:<a href="https://doi.org/10.1098/rsos.230215">10.1098/rsos.230215</a> (June 2023).</li><li><b>Minasandra, P.</b> &amp; Isvaran, K. Truncated power-law distribution of group sizes in antelope. <i>Behaviour</i> <b>157</b>, 541–558. doi:<a href="https://doi.org/10.1163/1568539X-bja10012">10.1163/1568539X-bja10012</a> (2020).</li></ol>	
Awards and fellowships	<b>DAAD - Graduate Student Scholarship Programme</b> Nominated after evaluation of my proposal €1200 per month for 4 years, as well as additional costs	2020 Oct onwards
	<b>Kishore Vaigyanik Protsahan Yojana</b> <i>All India Rank : 135</i> Includes stipend and contingency	2015- 2020
Mentorship	<b>Amlan Nayak</b> <i>Master thesis:</i> Spatial Variation of Vigilance in Meerkats.	2022 Jun- 2023 Apr
	<b>Ananya Passi</b> <i>Summer research:</i> Mathematical modelling of habitat use and population dynamics.	2019 Jun- 2020 May
Teaching	<b>Teaching Assistantship</b> For the course <i>Quantitative Ecology: Research Design and Inference</i> Assisted with coding in R, conducted several classes, graded assignments, managed course website.	2019 Aug - Dec
Contributed talks	<b>Descriptive &amp; Normative Models of Collective Behaviour</b> <i>School of Mathematics, University of Leeds</i> “Looking into hyena daily activity patterns using accelerometers”	2022 June
	<b>Animal Behaviour Society - Virtual Seminar 2021</b> “Behavioural classifier provides insights into spotted hyena behaviour”	2021 Aug

**Technical  
skills**

*Programming languages and related*

Python, Julia, R, Bash, L<sup>A</sup>T<sub>E</sub>X, and C. HTML, CSS, and git.

*Computational skills*

Parallel processing; Machine learning; Front-end development in R Shiny; Agent-based models;

*Mathematical modelling*

Models incorporating spatial and stochastic variables; Non-linear dynamics, including population dynamics and evolutionary dynamics; Probability models; Numerical simulations of all the above.

**References**

**Dr Ariana Strandburg-Peshkin,**  
Max Planck Institute of Animal Behavior  
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**Dr Alex L Jordan,**  
Max Planck Institute of Animal Behavior  
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**Dr Kavita Isvaran,**  
Indian Institute of Science  
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**Dr Vishwesh Guttal,**  
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